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Summary

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[See video assembly instructions](#)

Number of contacts Low Voltage	5
Wire Size/AWG	24 - 20
Gender	Standard
Plug	Plug - Straight
Locking system	Push-pull
Jacket cable outside diameter [mm]	3.80 - 10.70 mm
Size	1F
Suggested matching part	EGN.1F.305.XLM PHN.1F.305.XLM
Series	F - Rugged Push-Pull

https://www.lemo.com/int_en/solutions/optima/f-rugged-push-pull/fgn-1f-305-xlc.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	5
Contact Termination Low voltage	Crimp
R (max)	4.8 mOhm
Insert configuration value	1F.305 - 5 Low Voltage
Insulator	L: PEEK (UL 94 / V-0/1.5)
Rated current	9 A
Vtest (contact-contact)	1300 V (AC), 1840 V (DC)
Vtest (contact-shell)	1550 V (AC), 2200 V (DC)
Contact retention	30 N
Max. Conductor	0.5 mm ² (AWG 20)
Min. Conductor	0.25 mm ² (AWG 24)
Bucket Dia.	1.1 mm (0.043in)
Contact Dia.	0.9 mm (0.035in)
Wire Size/AWG	24 - 20
Gender	Standard

Form & Material

Shell style / Model id	FG - Straight plug
Plug	Straight
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Push-pull
Keying	3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	8.73 g

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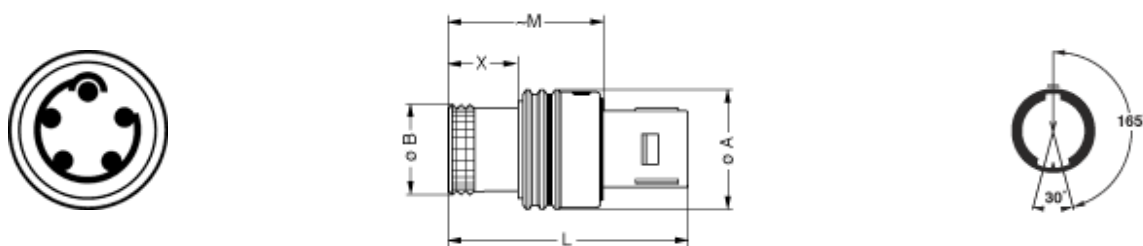
Environment

Technical domain	Motorsport, Security and Defence
Environmental sealing (IP rating)	IP67
Endurance	1000 mating cycles
Temperature range	-15°C / +200°C (max. temperature valid for short periods of use.)
Climatical Category	15/200/21 (Aluminium shell)
Humidity (max)	<=95% [at 60 deg C /140 F]
Shock Resistance	100 g [6 ms]
Vibration	15 g [10 Hz - 2000 Hz]
Salt Spray Corrosion	max. 48 hr

Cable fixation

Cable termination protection	Heatshrink
Fixation type	Heatshrink
Jacket cable outside diameter [mm]	3.80 - 10.70 mm

Drawings



Dimensions

	M	A	B	L	X
mm.	17.9	14	10.7	27.8	8
in.	0.7	0.55	0.42	1.09	0.31

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Recommended By Lemo

Accessories

Replacement contact	FGG.0B.560.ZZC
Compatible cap	BFG.1F.100.XAZ

Tools

Positionner	DCE.91.090.BVC
Extraction tool	DCC.09.05B.LAG
Crimp tool	DPC.91.701.V

Cables

Cable PartNumber	Material	Colour	Cable image
CMN.05.T20.057PGZE		grey	
CMN.05.T20.057PNZE			
CMN.05.T20.057QGZE	TPR (medical)	Grey	
CMN.05.T22.051QGZE	TPR (medical)	Grey	
150250	PVC	Grey	
250500	PVC	Grey	
50090	PVC	Black	
50140	PVC	Grey	

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